

Title (en)

FURNITURE HINGE DEVICE CAPABLE OF IMPLEMENTING WIDE RANGE LOADING

Title (de)

MÖBELSCHARNIERVERRICHTUNG ZUR IMPLEMENTIERUNG EINER WEITBEREICHSLADUNG

Title (fr)

DISPOSITIF DE CHARNIÈRE DE MEUBLE APTÉ À METTRE EN OEUVRE UN CHARGEMENT À LARGE PLAGE

Publication

**EP 4130415 A1 20230208 (EN)**

Application

**EP 20937210 A 20200916**

Priority

- CN 202010476035 A 20200529
- CN 2020115437 W 20200916

Abstract (en)

A furniture hinge device capable of implementing wide range loading, comprising a housing (1) and a fixing plate (2). A linkage assembly is provided between the housing (1) and the fixing plate (2). A lever assembly and a power assembly are provided on the housing (1). The power assembly comprises a primary spring (3) and a secondary spring (4). Positioning ends of the primary spring (3) and the secondary spring (4) are respectively mounted, from bottom to top, at a lower swinging end of the lever assembly. An adjustment assembly (5) is provided on connection ends of the primary spring (3) and the secondary spring (4). A fixing part of the adjustment assembly (5) is fixedly mounted on a side plate of the housing (1). Adjustment parts of the adjustment assembly (5) are respectively rotatably connected to the fixing part of the adjustment assembly (5) and are connected to adjustment ends of the primary spring (3) and the secondary spring (4), such that an operation length of the power assembly can be adjusted according to actual applications to adjust the magnitude of an action force.

IPC 8 full level

**E05D 3/06** (2006.01)

CPC (source: CN EP KR US)

**E05D 3/06** (2013.01 - CN EP KR US); **E05D 3/16** (2013.01 - EP); **E05D 5/0276** (2013.01 - CN KR US); **E05F 1/10** (2013.01 - US);  
**E05F 1/1276** (2013.01 - EP US); **E05F 5/02** (2013.01 - EP US); **E05F 5/08** (2013.01 - CN KR US); **E05D 5/0276** (2013.01 - EP);  
**E05Y 2201/256** (2013.01 - EP); **E05Y 2201/264** (2013.01 - EP); **E05Y 2201/47** (2013.01 - EP KR US); **E05Y 2201/638** (2013.01 - EP);  
**E05Y 2201/688** (2013.01 - EP); **E05Y 2600/10** (2013.01 - EP); **E05Y 2900/20** (2013.01 - EP KR US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4130415 A1 20230208; EP 4130415 A4 20230823**; CN 111561240 A 20200821; KR 20220129654 A 20220923;  
US 2023088619 A1 20230323; WO 2021237983 A1 20211202

DOCDB simple family (application)

**EP 20937210 A 20200916**; CN 202010476035 A 20200529; CN 2020115437 W 20200916; KR 20227030400 A 20200916;  
US 202017908432 A 20200916